



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,393	01/31/2001	Gregory Warren Goodknight	2705-155	4235
20575	7590	12/28/2004	EXAMINER	
MARGER JOHNSON & MCCOLLOM PC 1030 SW MORRISON STREET PORTLAND, OR 97205			MILLS, DONALD L	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,393

Applicant(s)

GOODKNIGHT, GREGORY
WARREN

Examiner

Donald L Mills

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding claims 12 and 21, the claims specify *altering the communication session between the first network device and the at least one other network device to transmit a packet data stream without performing any public switched telephone network conversion* (For example, see claim 12, lines 8-10.) However, the specification only states that the “devices alter the communications mode to avoid use of the PSTN converters at 46” and “the relaying of packets across the telephone network then commences” (See page 7, lines 6-8.) The method or apparatus for “altering the communication mode without any PSTN conversion to transmit a packet across a PSTN” is not described, the specification merely states that PSTN converters at 46 will be avoided. Furthermore, the specification does not describe transmitting a packet across a PSTN network without conversion to a PSTN compatible format as recited in the claims.

Claim Rejections - 35 USC § 102

Art Unit: 2662

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6 and 9-11 are rejected under 35 U.S.C. 102(e) as being anticipated by

Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton.

Regarding claims 1 and 11, Thornton discloses a voice-over-IP gateway, which comprises:

A converter operable to receive a packet data stream and to convert the packet data stream to a public switched telephone network data stream (Referring to Figure 1, the gateway will route the received packets through the PSTN or over the data network, converting the packets for transmission over the circuit switched network when the gateway determines that an auto-switch between the networks is necessary. See column 39, lines 63-67.)

A controller operable to (Referring to Figure 2, the gateway utilizes microcontroller 240,):

Send signals in the public switched telephone network data stream identifying the network device as a packet device (Referring to Figure 1, packets are transmitted over the PSTN after the originating IP based device has its destination IP address translated by the gateway. See column 11, lines 1-4.)

Receive signals indicating at least one other-network devices are participating in a public switched transmission session with the network device (Referring to Figure 1, the

Art Unit: 2662

IP destination device receives the call initiation via the gateway. See column 11, lines 1-4.)

Send the packet data stream across the public switched transmission network directly to the at least one other network device (Referring to Figure 1, voice data is exchanged by the originating and destination IP devices over the PSTN via the gateways. See column 11, lines 1-4.)

Regarding claim 2, Thornton discloses *the network device as a voice gateway* (Referring to Figure 1, the gateway will route the packets through the PSTN. See column 11, lines 1-4.)

Regarding claim 3, Thornton discloses *the packet data stream further comprising coded voice* (Referring to Figure 1, the packets are encoded voice traffic. See column 10, line 63.)

Regarding claim 4, Thornton discloses *the packet data stream further comprising data* (Referring to Figure 1, the packets are encoded voice traffic. See column 10, line 63.)

Regarding claim 5, Thornton discloses *the converter further comprising a voice coder/decoder* (Referring to Figures 1 and 2, the gateway utilizes a DSP to covert compressed telephony signals. See column 14, lines 22-25.)

Regarding claim 6, Thornton discloses *the converter further comprising a modem* (Referring to Figures 1 and 2, the gateway inherently acts as a modem by transmitting digital data signals over the analog PSTN.)

Regarding claim 9, Thornton discloses *the controller is a processor configured to execute all the control operations* (Referring to Figure 1, the gateway will route the packets through the PSTN, inherently responsible for executing the call-setup and brake-down. See column 11, lines 1-4.)

Regarding claim 10, Thornton discloses *the controller further comprising more than one integrated circuit* (Referring to Figure 2, the gateway utilizes eight separate DSPs 225₁, ..., 225₈. See column 14, lines 9-10.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7 and 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton, in view of Sebestyen (US 5,847,752).

Regarding claims 7 and 14 as explained above in the rejection statements of claims 1 and 12, Thornton discloses all of the claim limitations of claims 1 and 12 (parent claims).

Thornton does not disclose *the controller utilizing ITU V.8 protocols*.

Sebestyen teaches a method for call setup and control of video-telephone communication utilizing the ITU-T V.8 signaling protocol (See column 10, lines 19-24.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the video-telephone communication utilizing ITU-T V.8 signaling protocol of Sebestyen in the system of Thornton. One of ordinary skill in the art would have been motivated to do so in order to connect via analog or digital interfaces and maintain sufficient quality of service for the transmission of the signal.

Regarding claims 12 and 21, Thornton discloses a voice-over-IP gateway, which comprises:

Establishing a communication session between a first network device and other devices across a public switched telephone network by transmission of a public switched telephone network data stream (Referring to Figure 1, the gateway will route the packets through the PSTN for communicating IP based devices, inherently converting the packets for transmission over the circuit switched network. See column 11, lines 1-4.)

Using transmission of identifying signals to identify at least one other network device participating in the communication session as a packet device (Referring to Figure 1, packets are transmitted over the PSTN after the originating and destination IP based device have their IP addresses translated by the gateway. See column 11, lines 1-4.)

Altering the communication session between the first network device and the at least one other network device to transmit a packet data stream (Referring to Figure 1, depending on the quality of service needed to support voice traffic the gateway will route the packets through the data network, inherently transmitting a packet signal. See column 10, lines 65-67.)

Thornton does not disclose *without performing any public switched telephone network conversion*.

Sebestyen teaches a method for call setup and control of video-telephone communication utilizing the ITU-T V.8 signaling protocol (See column 10, lines 19-24,) which does not utilize PSTN conversion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the video-telephone communication utilizing ITU-T V.8 signaling

Art Unit: 2662

protocol of Sebestyen in the system of Thornton. One of ordinary skill in the art would have been motivated to do so in order to connect via analog or digital interfaces and maintain sufficient quality of service for the transmission of the signal while traversing a PSTN.

Regarding claim 13, the primary reference teaches *dialing out of a packet domain to a public switched telephone network domain* (Referring to Figure 1, the gateway will route the packets through the PSTN for communicating IP based devices, inherently dialing out of the packet domain to transmit data over the PSTN. See column 11, lines 1-4.)

Regarding claim 15, the primary reference teaches *eliminating a conversion through a voice coder/decoder* (Referring to Figure 1, depending on the quality of service needed to support voice traffic the gateway will route the packets through the data network, inherently avoiding a conversion through the voice coder/decoder required for transmission over the PSTN. See column 10, lines 65-67.)

Regarding claim 16, the primary reference teaches *eliminating a conversion through a modem* (Referring to Figure 1, depending on the quality of service needed to support voice traffic the gateway will route the packets through the data network, inherently avoiding the digital-to-analog conversion required by the gateway to transmit signals over the PSTN. See column 10, lines 65-67.)

Regarding claim 17, the primary reference teaches *gathering information on the at least one other network device and storing the information for future use* (Referring to Figures 1 and 2, the gateway inherently utilizes a routing table which corresponds IP addresses to network devices.)

Art Unit: 2662

Regarding claim 18, the primary reference teaches *accessing a storage of known network devices based upon the identifying signals; locating information about the at least one other network device; and using that information in altering the communication session* (Referring to Figures 1 and 2, the gateway inherently utilizes its internal routing table to correspond IP addresses to network devices in order to resolve IP destination addresses for communication IP based devices when routing data through the data network.)

Regarding claim 19, the primary reference teaches *the first network device sending the identifying signals* (Referring to Figure 1, packets are transmitted over the PSTN after the originating IP based device has its destination IP address translated by the gateway. See column 11, lines 1-4.)

Regarding claim 20, the primary reference teaches *the first network device receiving and responding to identifying signals sent by another network device* (Referring to Figure 1, the IP destination device receives the call initiation via the gateway and voice data is exchanged by the originating and destination IP devices over the PSTN via the gateways. See column 11, lines 1-4.)

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thornton et al. (US 6,363,065 B1), hereinafter referred to as Thornton.

Regarding claim 8 as explained above in the rejection statement of claim 1, Thornton discloses all of the claim limitations of claim 1 (parent claim).

Thornton does not disclose *the controller using robbed-bit signaling*.

Art Unit: 2662

Thornton teaches a voice-over-IP telephony gateway which utilizes call independent signaling over conventional H.323 messages.

It would have been obvious choice in design to one of ordinary skill in the art at the time the invention was made to implement robbed-bit signaling in the system of Thornton. One of ordinary skill in the art would have been motivated to do so in order to efficiently utilize the transmission bandwidth for signaling, voice band, and digital data traffic.

Response to Arguments

8. Applicant's arguments regarding claims 1-11 have been fully considered but they are not persuasive.

Rejection Under 35 USC § 102

On page 6 of the remarks, regarding claims 1-6, 9-13, and 15-20 the Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Also, Thornton discloses a gateway which determines network quality and dynamically switches between the data network and the PSTN, as necessary, requiring conversion to the appropriate format of the destination in response to dynamic changes in the QoS of the network (See column 4, lines 54-64.)

Specifically, regarding claims 2-6, 9, and 10, Thornton discloses the claimed invention as stated in the above art rejection.

Art Unit: 2662

9. Applicant's arguments with respect to claims 12-21 have been considered but are moot in view of the new grounds of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

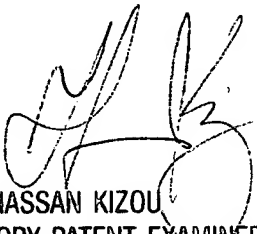
Art Unit: 2662

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills

DLM

December 22, 2004


HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600